Spinner Documentation

A Spinner is a loading indicator that provides visual feedback to users during asynchronous operations. It helps maintain user engagement by clearly communicating that a process is in progress, reducing perceived wait times and improving user experience.

Import

Basic Usage

```
<aava-spinner
  type="circular"
  color="primary"
  size="lg"
  [animation]="true"
></aava-spinner>
```

The spinner component supports multiple visual styles, sizes, and colors to match your application's design system.

Sizes

```
<aava-spinner
  type="circular"
  color="primary"
  size="xs"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="primary"
  size="sm"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="primary"
  size="md"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="primary"
  size="lg"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="primary"
  size="xl"
  [animation]="true"
></aava-spinner>
```

Available spinner sizes:

• xs (Extra Small) : Smallest spinner for inline use
• sm (Small) : Compact spinner for inline use
• md (Medium) : Default size for general use
• lg (Large) : Prominent spinner for important operations
• xl (Extra Large) : Maximum size for high-impact loading states

Colors

```
<aava-spinner
  type="circular"
  color="primary"
  size="lg"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="secondary"
  size="lg"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="success"
  size="lg"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="warning"
  size="lg"
  [animation]="true"
></aava-spinner>

<aava-spinner
  type="circular"
  color="danger"
  size="lg"
  [animation]="true"
></aava-spinner>
```

Semantic color variants:
• primary : Default brand color
• secondary : Secondary brand color
• success : Success state indication
• warning : Warning state indication
• danger : Error or critical state indication

Accessibility

Built-in accessibility features ensuring inclusive user experience for loading states.

Accessibility Features

• ARIA Labels : Use aria-label or aria-labelledby to describe the loading state
• Live Regions : Announce loading state changes to screen readers using aria-live
• Focus Management : Ensure proper focus handling during loading states
• Reduced Motion : Respect user preferences for reduced motion with prefers-reduced-motion
• Timeout Handling : Provide fallback mechanisms for extended loading times
• Screen Reader Support : Semantic HTML structure for assistive technologies
• Keyboard Navigation : Maintain keyboard accessibility during loading states

- Color Contrast : Ensure sufficient contrast for all spinner variants
- Status Communication : Clear communication of loading progress and completion

API Reference

Inputs

Property	Type	Default	Description
type	SpinnerType	'circular'	Visual style of the spinner
size	SpinnerSize	'md'	Size of the spinner
color	SpinnerColor	'primary'	Color variant of the spinner
animation	boolean	true	Whether to animate the spinner
progressIndex	number	undefined	Progress value for determinate loading (0-100)

CSS Custom Properties

Size Tokens

Property	Description	Default
--spinner-size-xs	Extra small spinner dimensions	16px
--spinner-size-sm	Small spinner dimensions	20px
--spinner-size-md	Medium spinner dimensions	24px
--spinner-size-lg	Large spinner dimensions	48px
--spinner-size-xl	Extra large spinner dimensions	64px

Color Tokens

Property	Description	Default
--spinner-primary-track	Primary spinner track color	rgba(59, 130, 246, 0.2)
--spinner-primary-fill	Primary spinner fill color	rgb(59, 130, 246)
--spinner-secondary-track	Secondary spinner track color	rgba(107, 114, 128, 0.2)
--spinner-secondary-fill	Secondary spinner fill color	rgb(107, 114, 128)
--spinner-success-track	Success spinner track color	rgba(34, 197, 94, 0.2)

Property	Description	Default
--spinner-success-fill	Success spinner fill color	rgb(34, 197, 94)
--spinner-warning-track	Warning spinner track color	rgba(245, 158, 11, 0.2)
--spinner-warning-fill	Warning spinner fill color	rgb(245, 158, 11)
--spinner-error-track	Error spinner track color	rgba(239, 68, 68, 0.2)
--spinner-error-fill	Error spinner fill color	rgb(239, 68, 68)

Animation Tokens

Property	Description	Default
--spinner-animation-duration	Spinner rotation duration	3s
--spinner-animation-timing	Spinner animation timing function	linear

Best Practices

Design Guidelines

• Context Appropriate : Use appropriate sizes for the context and available space
• Semantic Colors : Choose colors that align with your design system and semantic meaning
• Prominent Placement : Position spinners prominently for critical operations
• Loading States : Consider using skeleton screens for complex loading states
• Clear Context : Provide clear context about what is loading
• Consistent Timing : Use consistent animation timing across your application
• Visual Hierarchy : Size spinners according to the importance of the loading operation

Performance

• Timing Thresholds : Only show spinners for operations that take more than 200ms
• Animation Optimization : Use CSS animations instead of JavaScript for better performance
• Progress Indicators : Use progress mode for operations with known duration
• State Management : Implement proper loading state management to prevent flickering
• Resource Efficiency : Avoid unnecessary re-renders during loading states
• Bundle Size : Consider lazy loading spinner variants not immediately needed

User Experience

• Clear Messaging : Provide clear messaging about what is loading
• Consistent Patterns : Use consistent spinner styles throughout your application
• Cancel Options : Consider providing cancel options for long-running operations
• Error Handling : Implement proper error handling for failed operations
• Progress Feedback : For long operations, show progress or estimated time
• Completion States : Provide clear indication when loading is complete